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EDITORIAL COMMENT

Comment to: "Diode laser enucleation of the prostate (Dilep): technique and initial results"

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The characteristics of the holmium laser make it the ideal tool to perform endoscopic enucleation of the prostate (HoLEP): velocity, good cut, little penetration (0.4mm) and minimum alteration of the aspect of the tissue. On the contrary, its coagulation capacity is at times deficient. This disadvantage has resulted in an interest to reproduce the HoLEP technique with another source of energy that provides greater hemostasis. Thus, enucleation of the prostate has been described by means of the use of thulium (ThuLEP), diode (DiLEP)¹ and GreenLight ™lasers. Each laser has special properties that differentiate it in its cutting and coagulation capacity, the speed of dissection (contact / no contact), the level of tissue penetration (deep thermal damage), the degree of alteration of the aspect of the tissue, etc. For example, the diode laser is slow (it requires tissue contact) and penetrates 6mm into the tissue, and the thulium laser scorches the surface of the prostate, making it difficult to identify and to follow the plane of dissection. Although these lasers can be used for enucleation of the prostate, the scientific evidence available to support their use is limited.2 Randomized trials are required that demonstrate whether these lasers really have advantages in enucleation (velocity, ease of use, hemostasis) as compared to the holmium laser, and if the deeper penetration of the

diode laser is of clinical relevance. Likewise, prospective and randomized trials are required that demonstrate, as HoLEP^{3,4} has done, that the clinical improvement with these techniques is similar to that of conventional surgery and continues with time. Until then, their use should not be generalized.

References

- Buisan O, Saladie JM, Ruiz JM, Bernal S, Bayona S, Ibarz L. Enucleación prostática con láser de diodo 980 nm (Dilep): técnica y resultados iniciales. Actas Urol Esp. 2010.
- Bach T; Netsch C; Haecker A; Michel MS, Herrmann TR; Gross AL: Thulium: YAG laser enucleation (VapoEnucleation) of the prostate: safety and durability during intermediate-term followup. World J Urol. 2010;28:39-43.
- Kuntz RM; Lehrich K and Ahyai SA: Holmium laser enucleation of the prostate versus open prostatectomy for prostates greater than 100 grams: 5-year follow-up results of a randomised clinical trial. Eur Urol. 2008;53:160-6.
- Krambeck AE; Handa SE and Lingeman JE: Experience with more than 1,000 holmium laser prostate enucleations for benign prostatic hyperplasia. J Urol. 2010;183:1105-9.